

Name

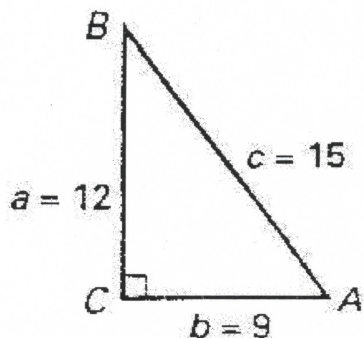
Answer Key

Period

Geometry Unit 7 Worksheet #6

$$S = \frac{O}{H} \quad C = \frac{A}{H} \quad T = \frac{O}{A}$$

For #1-6, write the trig ratio as a fraction in simplest terms.



1. $\sin A = \frac{12}{15} = \frac{4}{5}$

4. $\sin B = \frac{9}{15} = \frac{3}{5}$

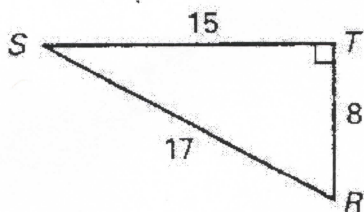
2. $\cos A = \frac{9}{15} = \frac{3}{5}$

5. $\cos B = \frac{12}{15} = \frac{4}{5}$

3. $\tan A = \frac{12}{9} = \frac{4}{3}$

6. $\tan B = \frac{9}{12} = \frac{3}{4}$

For #7-12, write the trig ratio as a fraction in simplest form.



7. $\sin R = \frac{15}{17}$

10. $\sin S = \frac{8}{17}$

8. $\cos R = \frac{8}{17}$

11. $\cos S = \frac{15}{17}$

9. $\tan R = \frac{15}{8}$

12. $\tan S = \frac{8}{15}$

For #13-18, use your calculator to find the value of the trig function. Round to three decimal places.

13. $\cos 72^\circ = 0.309$

14. $\sin 19^\circ = 0.326$

15. $\tan 50^\circ = 1.192$

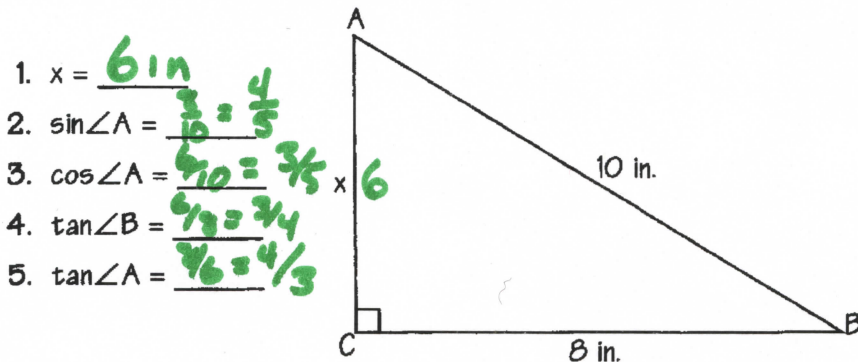
16. $\cos 27^\circ = 0.891$

17. $\sin 84^\circ = 0.995$

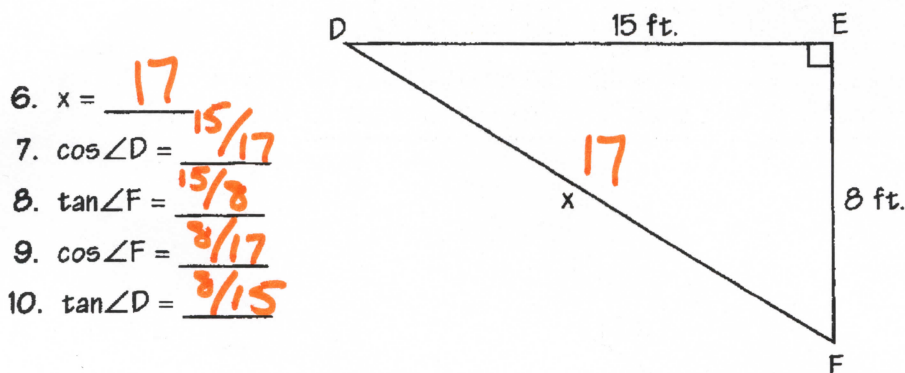
18. $\tan 23^\circ = 0.424$

What did the cannibal get when he was late for dinner?

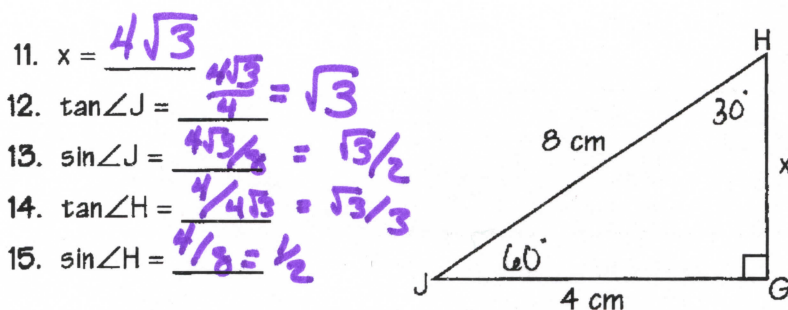
Find the missing variables and trigonometric ratios. The answer to each problem will match a letter that will allow you to figure out the joke.



T: $\frac{\sqrt{3}}{2}$ 13
 C: $\frac{\sqrt{3}}{3}$ 14
 O: $\frac{4}{5}$ 2
 R: $\frac{15}{8}$ 8
 L: 6 1



H: $\frac{3}{5}$ 3
 U: $\frac{1}{2}$ 15
 O: 17 6
 H: $\frac{4}{3}$ 5
 E: $\frac{8}{17}$ 9



D: $\sqrt{3}$ 12
 E: $\frac{3}{4}$ 4
 S: $4\sqrt{3}$ 11
 L: $\frac{15}{17}$ 7
 D: $\frac{8}{15}$ 10

T H E / C O L D / S H O U L D E R
 13 5 9 / 14 2 7 10 / 11 3 6 15 1 12 4 8

Triangles — Trigonometric Ratios

Joke #19